

1. Why don't noble gases react?
2. Helium does not have an *octet* of electrons yet it is placed in group 18. Why?
3. Which of the atomic particles are believed to be responsible for how atoms behave in a chemical reaction?
4. What are Lewis symbols?
5. Answer p. 35 #2, 3, 4, 5, 7
6. What is a *crystal lattice*?
7. Please note that we drew the crystal lattice as cubic in shape. Next time you look at a table salt crystal, you should notice that they are cubic in shape! But just to let you know, not all ionic compounds form crystal lattices that are cubic in shape.
  - (a) Explain why ionic solids cannot conduct electricity.
  - (b) Explain why ionic liquids will conduct electricity
  - (c) Explain why soluble ionic compounds will conduct electricity
8. What evidence suggests that the force of attraction in an ionic bond is strong?
9. A property of ionic solids is that they are brittle. How do we explain this?
10. Can the Bohr model illustrate how ions are formed?
11. Can the Bohr model explain the ratio in which atoms unite to form ionic compounds?